Rev F

astra telematics

AT240 Advanced Vehicle Tracking Device

PRELIMINARY

- ☺ Fully Integrated Device – simply hook up to power and ignition for a basic installation
- ☺ Compact dimensions – for ease of installation
- ☺ Very Low Idle Power Consumption – virtually zero battery drain on a parked vehicle
- ☺ Latest 50 channel GPS with -160dBm sensitivity
- ☺ Wide DC power input – no need for voltage droppers
- ☺ Internal back-up battery – 12 hrs continuous or 10 days in hourly update mode
- ☺ GPRS (TCP or UDP), SMS PDU and SMS Text modes
- ☺ IP67 Weather-proof enclosure
- ☺ User Authentication and Driver Identification by Bluetooth or iButton
- ☺ Piezoelectric sounder to assist in close range vehicle location
- ☺ Built in 3 axis MEMS based accelerometer
- ☺ 6 Digital inputs + 2 built in relays + 2 ADCs + 2 RS232 + USB +CANBus
- ☺ Simple and flexible user configuration by USB, SMS or GPRS
- ☺ Remote diagnostics by GPRS or SMS
- ☺ On-board zone alarm function, incl. London Congestion Zone
- ☺ Over the air firmware update
- ☺ Intelligent and efficient reporting protocols – to minimise airtime usage and cost
- ☺ 3 year warranty included as standard
- ☺ Field service included FOC for UK customers
- ☺ Designed in the United Kingdom

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“Mater artium necessitas - Necessity is the Mother of Invention”

The AT240, like the old adage says, was inspired by necessity. In November of 2007, the designers motorcycle was stolen from under his nose, and so started the quest for revenge!

The AT240 is a simple and yet powerful vehicle tracking device designed specifically to suit vehicle security applications. The small size and simple interfaces make the AT240 easy to install discreetly on a variety of vehicles. The ‘automotive’ looks will not draw any attention, as the AT240 does not appear out of place in an engine bay, behind a vehicle dashboard or behind a motorcycle cowling.

The AT240 has discreet labelling and no external indicators to give away its purpose. The tough nylon case is tamper resistant. The internal battery and antennas allow tracking functions to continue even after the wiring loom has been hacked off or disconnected.

Any movement or use of the vehicle by any other than the authorised user will raise a *silent* alarm message, which can be sent by SMS, email or TCP mode.

The AT240 utilises the very latest GPS technology, with 50 channels and -160dBm sensitivity for ultra-fast time-to-first-fix and fix availability in the most demanding locations. This performance comes without the usual power consumption compromises, as you can see on the next page.

The AT240 is ideal for use on motorcycles and caravans, where space is limited and low power consumption is critical. In idle mode (vehicle ignition off and stationary), the AT240 draws virtually no power from the external power source. There is no need to use battery trickle chargers and optimisers, which can be an obvious tell-tale sign of a security device being installed.

In the event of unauthorised vehicle movement, the AT240 will alert the user and thereafter send periodic location reports until a final destination is reached. Close range location can be aided by the activation of a high intensity piezoelectric sounder.

The AT240 can also be used in vehicle fleet management application, where its simplicity, size and low cost are also of great benefit. The usual journey reporting options are supported (as per our AT100).

PRELIMINARY

TECHNICAL SPECIFICATIONS

E-GSM/GPRS Modem:	2 Watts (E-GSM900 and GSM850 Class 4) 1 Watt (GSM1800 and GSM1900 Class 1) GPRS multi-slot class 10
GSM up-link (TX): **Frequencies**	824 – 849 MHz, 880 – 915 MHz, 1710 - 1785 MHz, 1850 – 1910 MHz
GSM down-link (RX): **Frequencies**	869 – 894 MHz, 925 - 960 MHz, 1805 - 1880 MHz, 1930 - 1990 MHz
GPS Receiver:	
L1 receiver:	50 channels
Position accuracy:	2.5m CEP
Receiver sensitivity:	-160dBm (tracking)
TTFF: Cold start	29 sec
Hot start	1 sec
Input voltage:	6 – 36 volts DC
Internal Battery:	3.7V, 1350mAh
Battery Life:	12 hours continuous operation 10 days operation in hourly update mode
Data transfer modes:	GPRS (TCP/UDP) SMS PDU SMS Text
Inputs/outputs:	6 digital inputs (4 opto-coupled, 2 pull-down) 2 relays (max 1.0A, 30V) 2 RS232 serial ports 2 ADC inputs USB CANBus iButton
User authentication:	Bluetooth
Sounder Level:	> 80dB
Current consumption, max:	300mA @ 12 VDC (battery charging at max. rate)
Current consumption, average:	
CONTINUOUS	25 mA @ 12VDC (battery fully charged)
SLEEP MODE	0.1mA @ 12VDC
Dimensions:	100 x 70 x 25 mm (3.9” x 2.7” x 1.0”)
Weight:	180g
Ingress Protection:	IP67
Temperature:	
Operating	-20 to +60°C
Storage	-30 to +85°C
Connectors:	
Power and Data	Samtec RCT
Product Approvals:	CE, 2004/104/EC

Note: Specifications may change without notice.

PRELIMINARY